

## **Excursion to Godawari Power & Ispat Limited, Siltara**

**02.11.2023**

A group of students (chemistry stream) from the Center for Basic Sciences, Pt. Ravishankar Shukla University, Raipur visited Godawari Power & Ispat Limited (GPIL), Siltara, Raipur on 02.11.2023. The study tour was led by Dr. Bhanushree Gupta (Assistant Professor, Chemistry), supported by other faculty members. The excursion was aimed to enrich students with practical knowledge and experience of concepts of metallurgy. GPIL deals with iron ores for the production of iron wires as the end product. At the excursion site, the CBS team was warmly welcomed by Mr. Vivek Agrawal, CEO of GPIL. Following a brief presentation on GPIL, safety instructions were given and the visitors were equipped with PPEs to ensure everyone's safety during the site visit. The tour started with a visit to the pellet division where iron ores collected through mining are crushed and screened to produce iron pellets. This was followed by a visit to the Sponge Iron Division (SID) where iron pellets were reduced by coal at high temperatures to produce direct reduced iron (DRI) or sponge iron. Students got to interact with the division employees and understand the principles and procedure of the reduction method and the working of a 72-meter-long rotary kiln. Further, visitors were taken to a 25 MW Waste Heat Recovery Boiler (WHRB) to make them understand the power generation process. At WHRB, students got to see the mechanical build-up with components like turbines, generators, electrostatic precipitators (ESP) etc., and visit the control room to understand the work-flow. The concluding part of the site visit fascinated the students as they visited the Steel Melting Shop (SMS) where sponge iron was melted and converted into iron bars followed by a gradual decrement in their width to produce thin iron wires as the end product. The study tour was a never-forgetting experience for students and helped them understand the concepts of metallurgy in a real environment with proper guidance to boost their prior textual knowledge on the subject.

### **Glimpses of the Excursion**



**Beginning of the study tour**



**Godawari Power & Ispat Limited, Siltara**



**Welcome at GPII, Siltara by Mr. Vivek Agrawal**



**Felicitations of Dr. Bhanushree Gupta by Mr. Vivek Agrawal**





**Brief presentation on GPIL and safety instructions**



**Students and faculty members of CBS in Personal Protective Equipment**



**Visit to Sponge Iron Division (SID)**





**Inside the control room at Sponge Iron Division (SID)**



**Control room of Waste Heat Recovery Boiler (WHRB)**



**Faculty members of CBS, Pt. RSU at GPII**